



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,885	06/07/2005	Benoit Agnus	FR 020137	7222
65913	7590	02/11/2009		
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			EXAMINER PHAM, TUAN	
			ART UNIT 2618	PAPER NUMBER
			NOTIFICATION DATE 02/11/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No. 10/537,885	Applicant(s) AGNUS ET AL.	
	Examiner TUAN A. PHAM	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/22/2009 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2618

3. Claims 1, 5, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson, Markku (WO 02/13427 A1, hereinafter, "Henriksson") in view of Hane (Patent No.: US 4,728,955).

Regarding claims 1, 5, and 8, Henriksson teaches an integrated circuit

Comprising (see figure 2, test module 200, [0005]):

a signal transmission channel (TX) including radio frequencies (see figure 2, transmitter 200 transmit the RF signal to base station); and

an integrated tester to test radio characteristics of said integrated circuit (see figure 2, transmitter 100, test module 200, a test module 200 for testing the transmitter and receiver which can be integrated microcircuit [0005, 0012]), wherein the tester is independent of the signal transmission channel (see figure 2, it is clearly seen that the test module 200 is separated from the transmission path).

It should be noticed that Henriksson fails to teach first means for recovering a part of a signal generated by the transmission channel (TX) at a first frequency, second means for converting said recovered signal from the first frequency into a second frequency, an amplifier for amplifying said signal at this second frequency, and a rectifier for rectifying said signal. However, Hane teaches first means for recovering a part of a signal generated by the transmission channel (TX) at a first frequency (see figure 10, directional coupling 15, col.6, ln.48-65), second means for converting said recovered signal from the first frequency into a second frequency (see figure 10, mixer 21, col.6, ln.48-65), an amplifier for amplifying said signal at this second frequency (see figure 10, amplifier 25', col.6, ln.48-65), and a rectifier for rectifying said signal (see

Art Unit: 2618

figure 10, rectifier 30, col.6, ln. 48-65, it is clearly seen that the coupling 15, mixer 21, amplifier 25', and rectifier 30 are separate path from transmission path). Since both of Henriksson and Hane teach a transceiver. Henriksson further disclose a test module. **It is well known in the art to combine the known elements such as a coupler, mixer, amplifier, and rectifier into the test module of Henriksson to arrive the claimed invention.**

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Hane into view of Henriksson in order to communicate in a short range.

Regarding claim 11, Henriksson further teaches a tester (see figure 2, test module 200).

4. Claims 2-4, 6-7, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson, Markku (WO 02/13427 A1, hereinafter, "Henriksson") in view of Hane (Patent No.: US 4,728,955) as applied to claims 1, 5, and 8 above, and further in view of Asam et al. (Patent No.: US 6,853,836, hereinafter, "Asam").

Regarding claims 2, 6, and 9, Henriksson and Hane, in combination, fails to teach detection means for detecting the validity of the signal generated by the transmission channel. However, Asam teaches detection means for detecting the validity of the signal generated by the transmission channel (see frequency detector PFD, col.6, ln.1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Asam into view of Henriksson and Hane in order to provide a low energy needs for the device as suggested by Asam at col.1, ln.29-31.

Regarding claims 3, 7, and 10, Asam further teaches a filter for filtering harmonics signal (see filter TP).

Regarding claim 4, Asam further teaches the first frequency (RF) is a radio frequency and the second frequency (IF) is a low frequency (see col.6, ln.1-45).

5. Claims 12-13, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson, Markku (WO 02/13427 A1, hereinafter, “Henriksson”) in view of Hane (Patent No.: US 4,728,955) as applied to claims 1, 5, and 8 above, and further in view of Johnson (Patent No.: US 6,766,150).

Regarding claims 12, Henriksson and Hane, in combination, fails to teach said tester is further configured to output a comparison signal separately from said signal transmission channel. However, Johnson teaches said tester is further configured to output a comparison signal separately from said signal transmission channel (see figure 4, calibrator controller 365 compare the calibrator in the feedback loop that separated from the transmit path, see col.9, ln.34-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Johnson into view of Henriksson and Hane in order to adjust the transmit signal.

Regarding claims 13, Johnson further teaches said tester is further configured to output the comparison signal along a signal path separate from an antenna signal path (see figure 4, calibrator controller 365 compare the calibrator in the feedback loop that separated from the antenna, see col.9, ln.34-43).

Regarding claims 17 and 20, Johnson further teaches outputting a comparison signal separately from said signal transmission channel along a signal path separate from an antenna signal path (see figure 4, calibrator controller 365 compare the calibrator in the feedback loop that separated from the transmit path and antenna, see col.9, ln.34-43).

6. Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson, Markku (WO 02/13427 A1, hereinafter, "Henriksson") in view of Hane (Patent No.: US 4,728,955) as applied to claims 1 and 5 above, and further in view of Kim et al. (Patent No.: US 6,313,644, hereinafter, "Kim").

Regarding claims 14 and 18, Henriksson and Hane, in combination, fails to teach said first means is further configured to recover about 1/1000 of the signal generated by the transmission channel, wherein the first means possesses an attenuation of about 30 dB. However, Kim teaches said first means is further configured to recover about 1/1000 of the signal generated by the transmission channel, wherein the first means possesses an attenuation of about 30 dB (see col.2, ln.21-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kim into view of Henriksson and Hane in order to improve the transmission.

7. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson, Markku (WO 02/13427 A1, hereinafter, "Henriksson") in view of Hane (Patent No.: US 4,728,955), and Asam et al. (Patent No.: US 6,853,836, hereinafter, "Asam") as applied to claim 1 above, and further in view of Rodgers et al. (Pub. No.: US 2002/0011932, hereinafter, "Rodgers").

Regarding claim 15, Henriksson, Hane, and Asam, in combination, fails to teach the detection means is configured to detect the validity of a power level of the signal generated by the transmission channel to verify that the power level is within an expected range. However, Rodgers teaches the detection means is configured to detect the validity of a power level of the signal generated by the transmission channel to verify that the power level is within an expected range (see [0066]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Rodgers into view of Henriksson, Hane, and Asam in order to improve the transmission.

Regarding claim 16, Rodgers further teaches the detection means is configured to detect a spectral purity of the signal generated by the transmission channel (see [0066]).

Art Unit: 2618

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson, Markku (WO 02/13427 A1, hereinafter, "Henriksson") in view of Hane (Patent No.: US 4,728,955) as applied to claim 5 above, and further in view of Rodgers et al. (Pub. No.: US 2002/0011932, hereinafter, "Rodgers").

Regarding claim 19, Henriksson and Hane, in combination, fails to teach the detection means is configured to detect the validity of a power level of the signal generated by the transmission channel to verify that the power level is within an expected range. However, Rodgers teaches the detection means is configured to detect the validity of a power level of the signal generated by the transmission channel to verify that the power level is within an expected range (see [0066]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Rodgers into view of Henriksson and Hane in order to improve the transmission.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/TUAN A PHAM/

Primary Examiner, Art Unit 2618

Application/Control Number: 10/537,885
Art Unit: 2618

Page 10